

CGR-F Flange Output Series | Customer Selection Table

Series	Model	Available Axis Ratios	Available Shell Ratios	Rated Output Torque (Nm)	Max. Acceleration Torque (Nm)	Permissible Torque (Nm)	Rated Input Speed (rpm)	Max. Input Speed (rpm)	Tilting Stiffness (Nm/arcmin)	Torsional Stiffness (Nm/arcmin)	Max. Axial Force (kN)	Max. Radial Force (kN)	Weight (kg)
CGR-F Flange Output	CGR-F-005	15 / 21 / 51	12 / 22 / 52	5–10	10–20	15–30	3000	6000	9	1.5	0.6	0.8	0.05
CGR-F Flange Output	CGR-F-007	21 / 41 / 51	12 / 42 / 52	10–30	20–60	30–90	3000	6000	13	2.1	0.8	1	0.08
CGR-F Flange Output	CGR-F-012	11 / 21 / 31 / 51 / 81	12 / 22 / 32 / 52 / 82	15–50	30–100	45–150	3000	6000	60	8	2.5	3.3	0.8
CGR-F Flange Output	CGR-F-017	21 / 31 / 41 / 51 / 81	22 / 32 / 42 / 52 / 82	30–70	60–140	90–210	3000	6000	65	10	2.5	3.3	0.98
CGR-F Flange Output	CGR-F-025	21 / 31 / 51 / 81 / 101	22 / 32 / 52 / 82 / 102	50–130	100–260	150–390	3000	5500	130	18	5.5	7.1	2.18
CGR-F Flange Output	CGR-F-032	25 / 31 / 51 / 81 / 101 / 121	26 / 32 / 52 / 82 / 102 / 122	120–300	240–600	360–900	3000	4500	300	50	8.5	11	4.66
CGR-F Flange Output	CGR-F-040	31 / 51 / 81 / 121	32 / 52 / 82 / 122	250–600	500–1200	750–1800	3000	4000	450	75	10.9	14.3	7.5

Note: Axis ratio, shell ratio, and torque values are preserved as supplied. The detailed ratio-to-torque mapping is shown on the CGR-F Series sheet.

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CYCLOIDAL GEAR REDUCERS

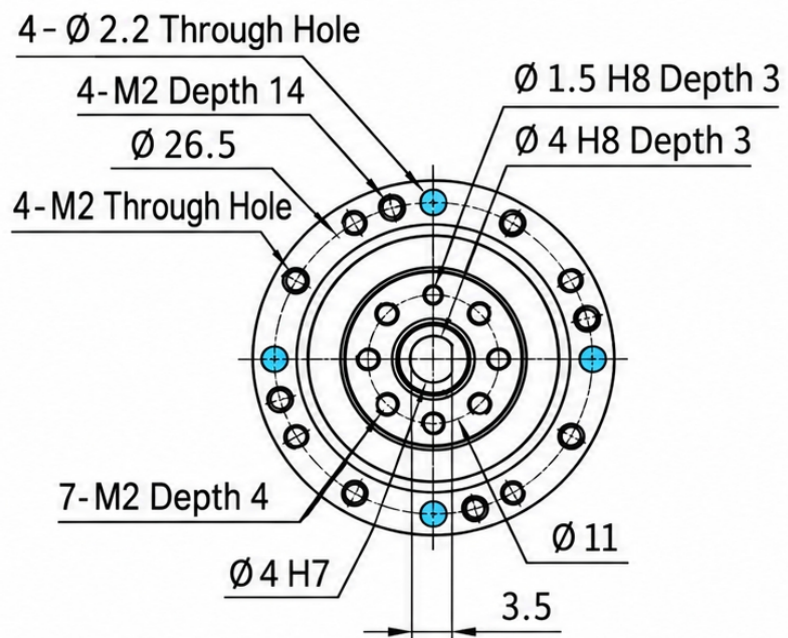
CGR-F Flange Output Series | Technical Specifications

CGR-F-005 | Flange Output Cycloidal Gear Reducer

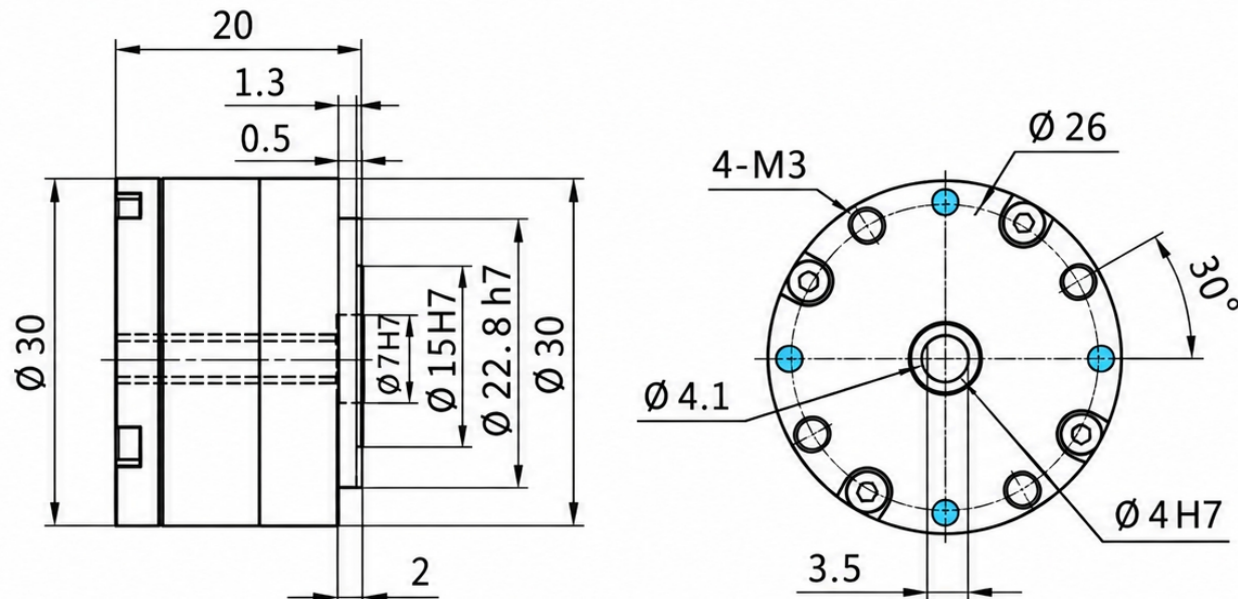
Model No.	Axis Ratio	Shell Ratio	Rated Output Torque (Nm)	Max. Acceleration Torque (Nm)	Permissible Torque (Nm)	Max. No-load Moment (Nm)
CGR-F-005-R15	15	12	5	10	15	0.12
CGR-F-005-R21	21	22	8	16	24	0.1
CGR-F-005-R51	51	52	10	20	30	0.1

Common Specifications	Unit	Value
Rated Input Speed	rpm	3000
Max. Input Speed	rpm	6000
Tilting Stiffness	Nm/arcmin	9
Torsional Stiffness	Nm/arcmin	1.5
Max. Axial Force	kN	0.6
Max. Radial Force	kN	0.8
Average Angular Play	arcsec	±30
Backlash	arcmin	p0 ≤1; p1 ≤3; p2 ≤5
Moment of Inertia	10 ⁻⁶ kg·m²	0.3
Weight	kg	0.05

Output Side



Input Side



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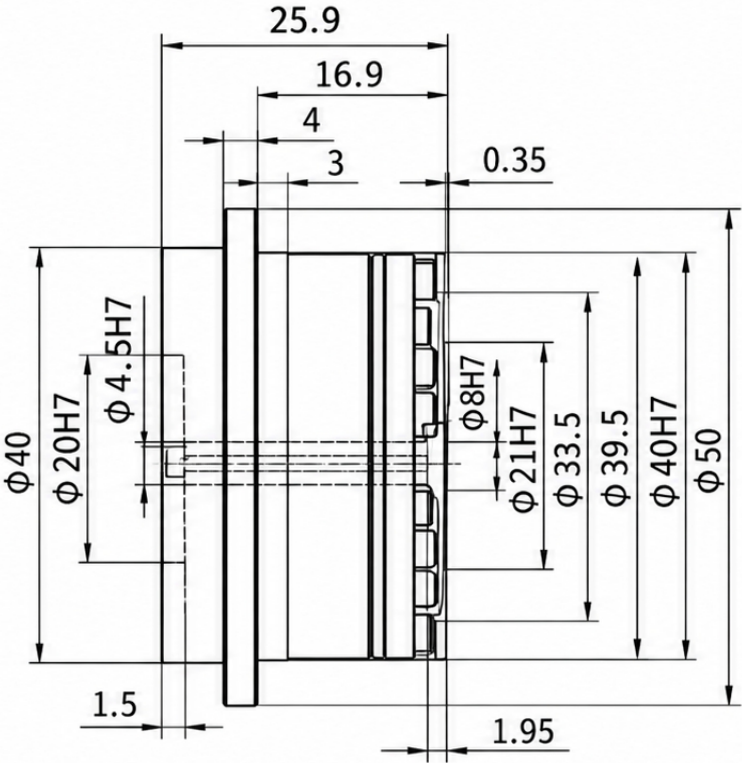
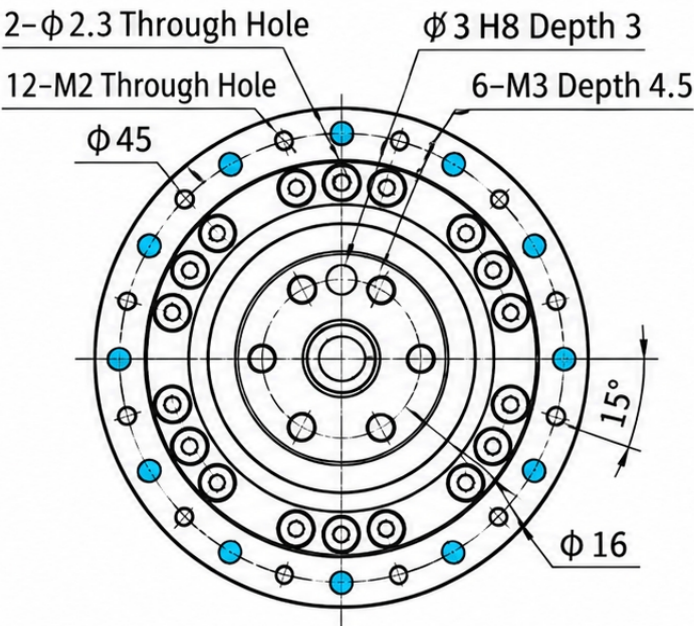
CGR-F Flange Output Series | Technical Specifications

CGR-F-007 | Flange Output Cycloidal Gear Reducer

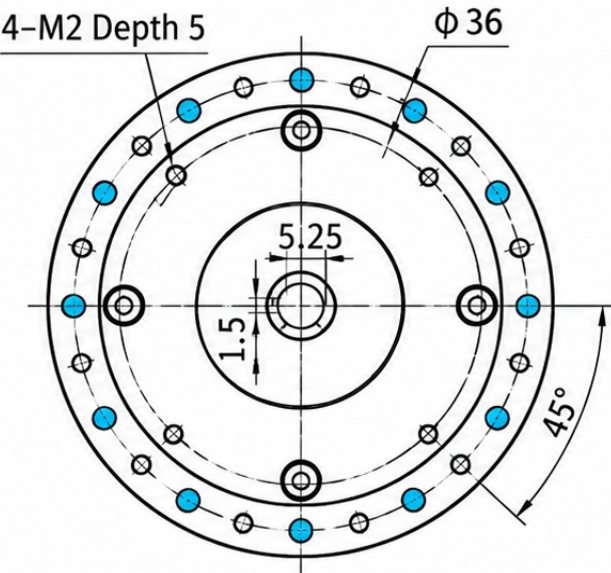
Model No.	Axis Ratio	Shell Ratio	Rated Output Torque (Nm)	Max. Acceleration Torque (Nm)	Permissible Torque (Nm)	Max. No-load Moment (Nm)
CGR-F-007-R21	21	12	10	20	30	0.1
CGR-F-007-R41	41	42	15	30	45	0.12
CGR-F-007-R51	51	52	30	60	90	0.12

Common Specifications	Unit	Value
Rated Input Speed	rpm	3000
Max. Input Speed	rpm	6000
Tilting Stiffness	Nm/arcmin	13
Torsional Stiffness	Nm/arcmin	2.1
Max. Axial Force	kN	0.8
Max. Radial Force	kN	1
Average Angular Play	arcsec	±30
Backlash	arcmin	p0 ≤1; p1 ≤3; p2 ≤5
Moment of Inertia	10 ⁻⁶ kg·m²	1
Weight	kg	0.08

Output Side



Input Side



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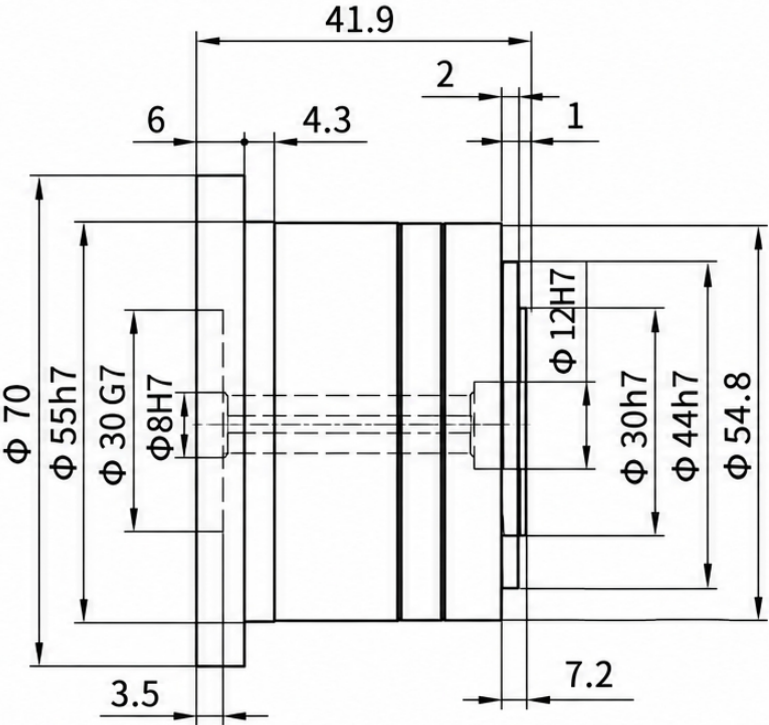
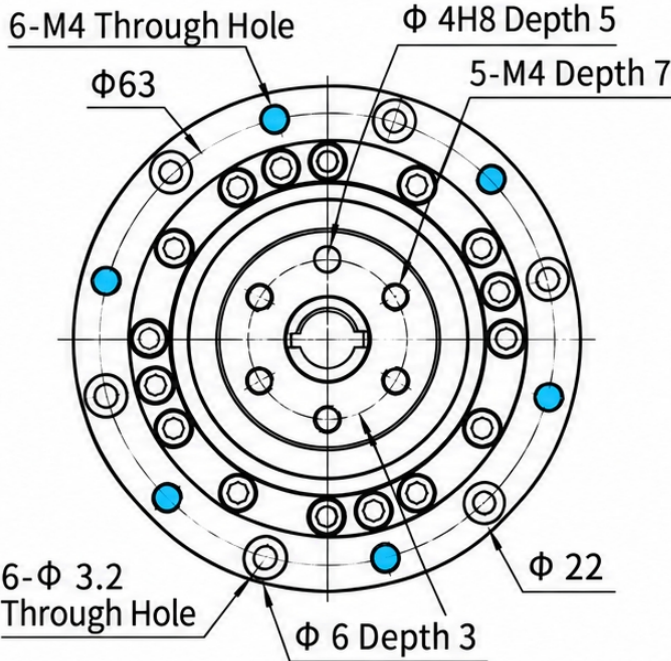
CGR-F Flange Output Series | Technical Specifications

CGR-F-012 | Flange Output Cycloidal Gear Reducer

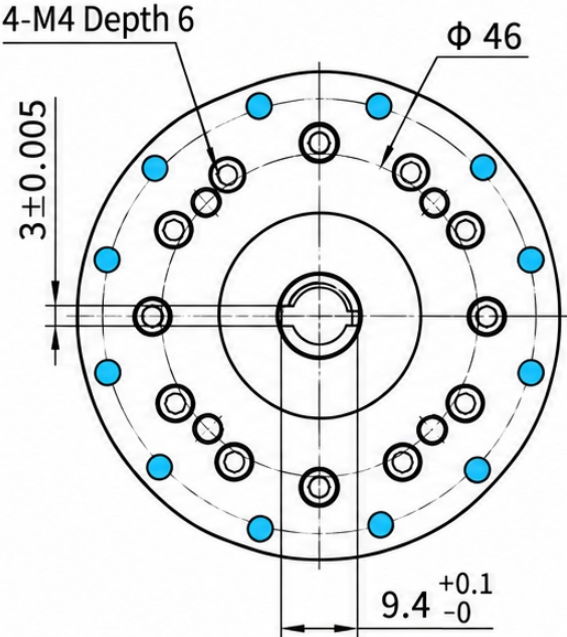
Model No.	Axis Ratio	Shell Ratio	Rated Output Torque (Nm)	Max. Acceleration Torque (Nm)	Permissible Torque (Nm)	Max. No-load Moment (Nm)
CGR-F-012-R11	11	12	15	30	45	0.2
CGR-F-012-R21	21	22	20	40	60	0.2
CGR-F-012-R31	31	32	30	60	90	0.19
CGR-F-012-R51	51	52	40	80	120	0.18
CGR-F-012-R81	81	82	50	100	150	0.17

Common Specifications	Unit	Value
Rated Input Speed	rpm	3000
Max. Input Speed	rpm	6000
Tilting Stiffness	Nm/arcmin	60
Torsional Stiffness	Nm/arcmin	8
Max. Axial Force	kN	2.5
Max. Radial Force	kN	3.3
Average Angular Play	arcsec	±20
Backlash	arcmin	p0 ≤1; p1 ≤3; p2 ≤5
Moment of Inertia	10 ⁻⁶ kg·m²	3.5
Weight	kg	0.8

Output Side



Input Side



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CGR-F Flange Output Series | Technical Specifications

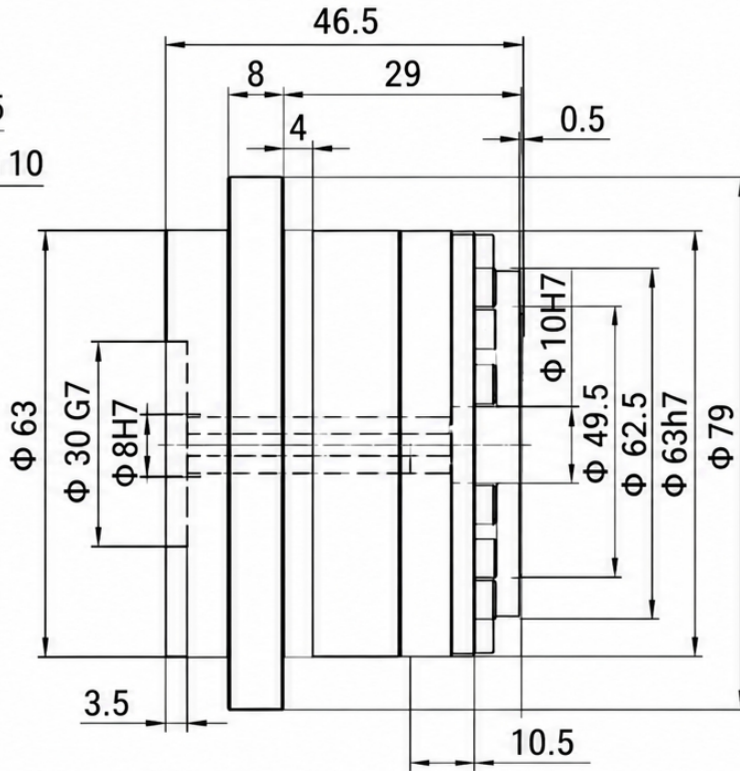
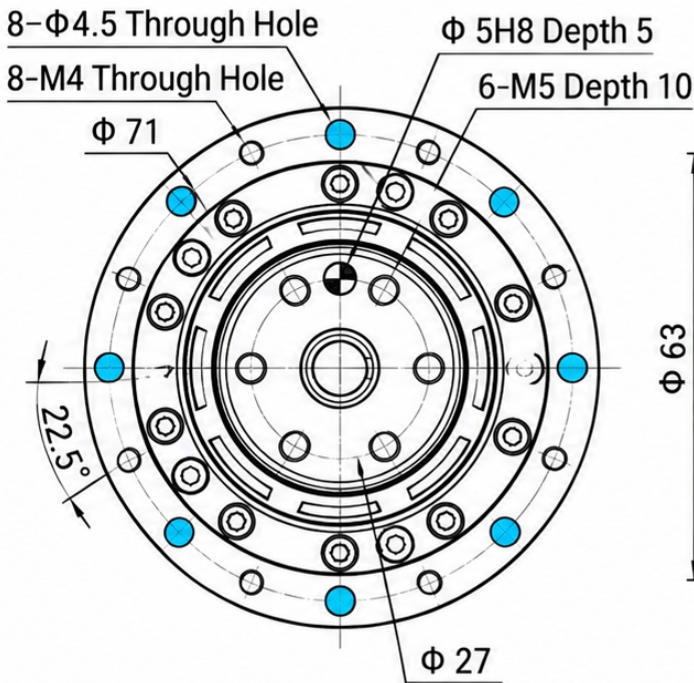
CGR-F-017 | Flange Output Cycloidal Gear Reducer

Model No.	Axis Ratio	Shell Ratio	Rated Output Torque (Nm)	Max. Acceleration Torque (Nm)	Permissible Torque (Nm)	Max. No-load Moment (Nm)
CGR-F-017-R21	21	22	30	60	90	0.3
CGR-F-017-R31	31	32	40	80	120	0.29
CGR-F-017-R41	41	42	50	100	150	0.28
CGR-F-017-R51	51	52	60	120	180	0.27
CGR-F-017-R81	81	82	70	140	210	0.27

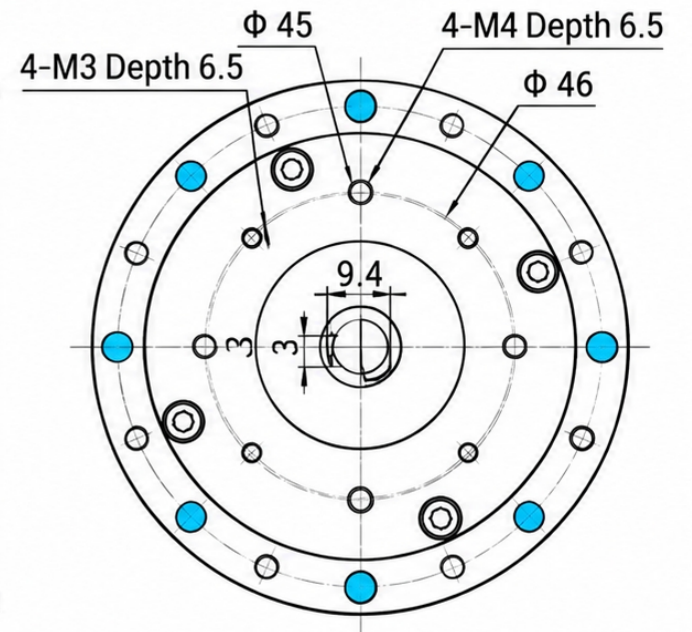
Common Specifications	Unit	Value
Rated Input Speed	rpm	3000
Max. Input Speed	rpm	6000
Tilting Stiffness	Nm/arcmin	65
Torsional Stiffness	Nm/arcmin	10
Max. Axial Force	kN	2.5
Max. Radial Force	kN	3.3
Average Angular Play	arcsec	±20
Backlash	arcmin	p0 ≤1; p1 ≤3; p2 ≤5
Moment of Inertia	10 ⁻⁶ kg·m²	5.2
Weight	kg	0.98

DIMENSION DRAWING

Output Side



Input Side



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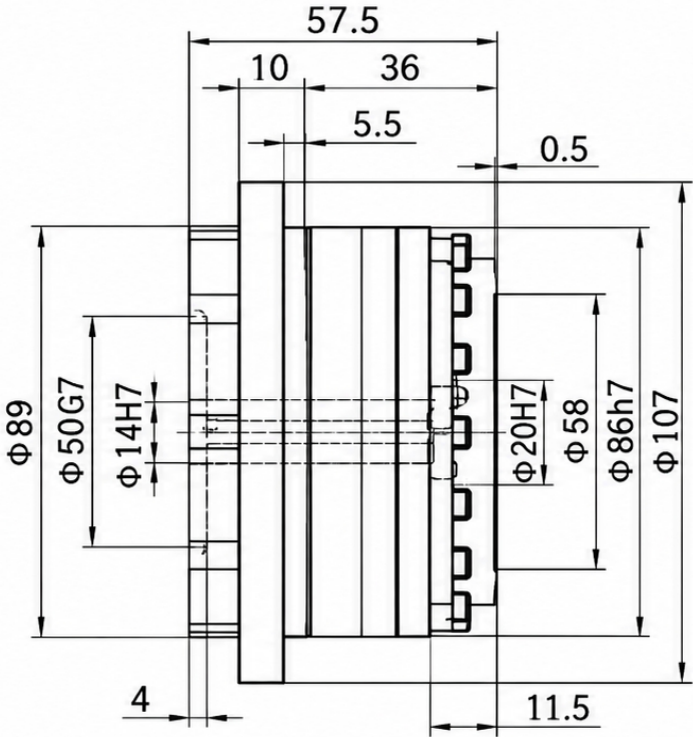
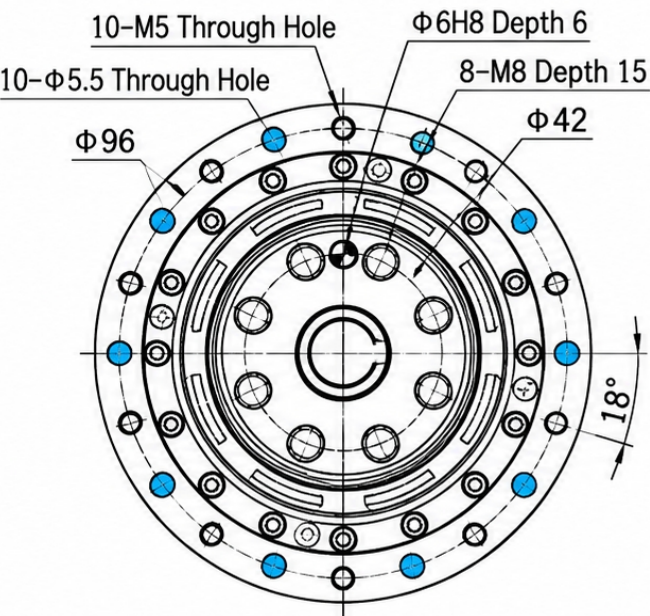
CGR-F Flange Output Series | Technical Specifications

CGR-F-025 | Flange Output Cycloidal Gear Reducer

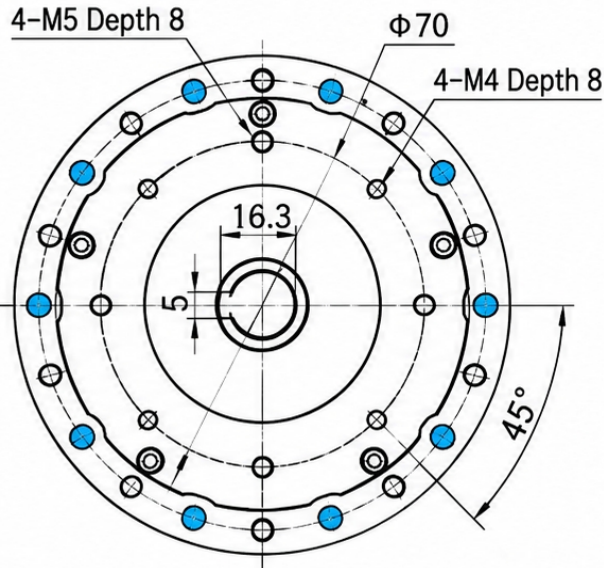
Model No.	Axis Ratio	Shell Ratio	Rated Output Torque (Nm)	Max. Acceleration Torque (Nm)	Permissible Torque (Nm)	Max. No-load Moment (Nm)
CGR-F-025-R21	21	22	50	100	150	0.4
CGR-F-025-R31	31	32	60	120	180	0.37
CGR-F-025-R51	51	52	80	160	240	0.35
CGR-F-025-R81	81	82	110	220	330	0.34
CGR-F-025-R101	101	102	130	260	390	0.33

Common Specifications	Unit	Value
Rated Input Speed	rpm	3000
Max. Input Speed	rpm	5500
Tilting Stiffness	Nm/arcmin	130
Torsional Stiffness	Nm/arcmin	18
Max. Axial Force	kN	5.5
Max. Radial Force	kN	7.1
Average Angular Play	arcsec	±20
Backlash	arcmin	p0 ≤1; p1 ≤3; p2 ≤5
Moment of Inertia	10 ⁻⁶ kg·m²	6.2
Weight	kg	2.18

Output Side



Input Side



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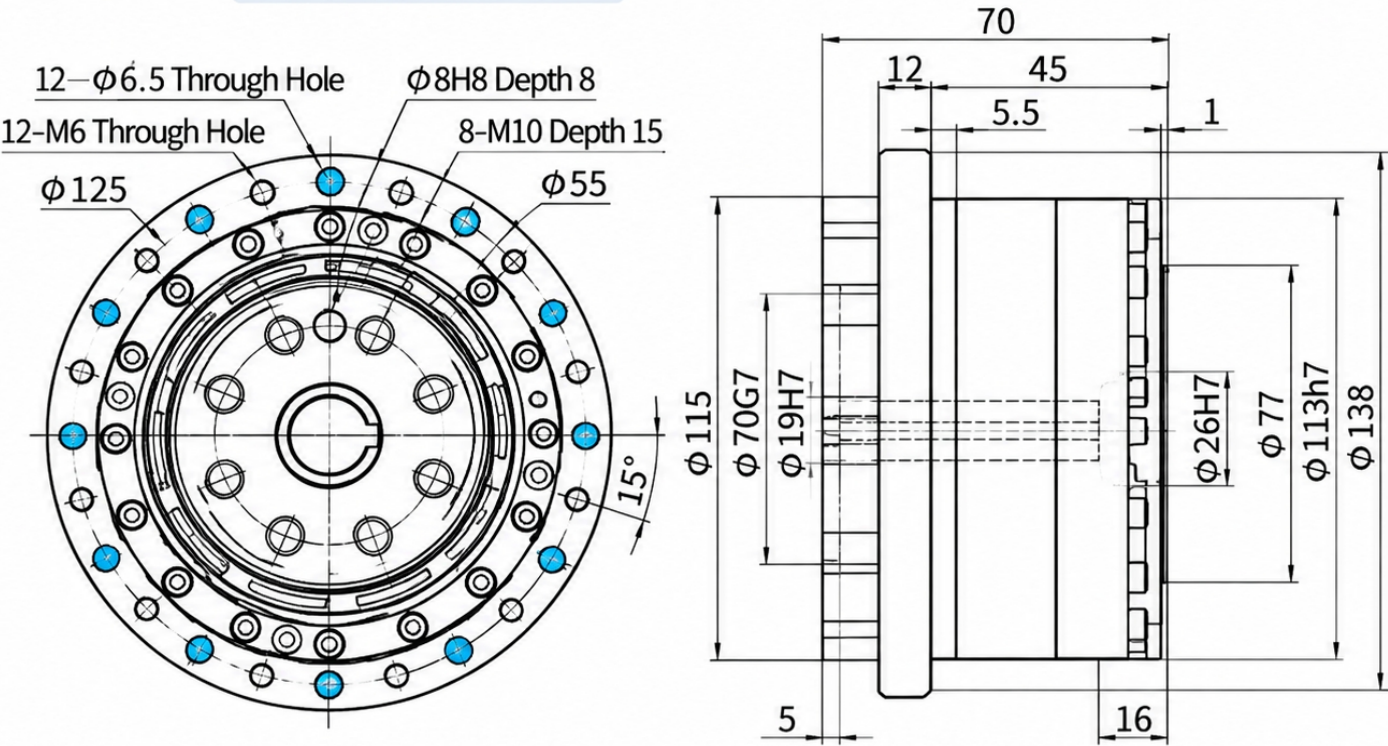
CYCLOIDAL GEAR REDUCERS

CGR-F Flange Output Series | Technical Specifications

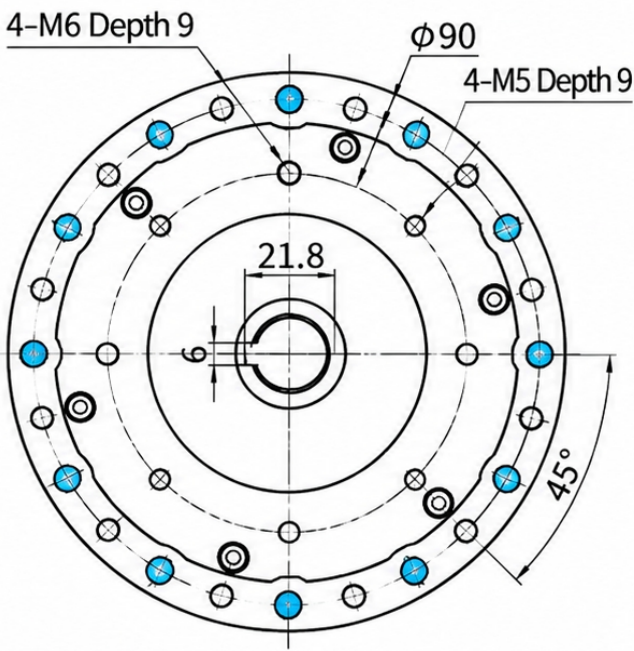
CGR-F-032 Flange Output Cycloidal Gear Reducer						
Model No.	Axis Ratio	Shell Ratio	Rated Output Torque (Nm)	Max. Acceleration Torque (Nm)	Permissible Torque (Nm)	Max. No-load Moment (Nm)
CGR-F-032-R25	25	26	120	240	360	0.65
CGR-F-032-R31	31	32	150	300	450	0.63
CGR-F-032-R51	51	52	180	360	540	0.6
CGR-F-032-R81	81	82	220	440	660	0.6
CGR-F-032-R101	101	102	260	520	780	0.6
CGR-F-032-R121	121	122	300	600	900	0.6

Common Specifications	Unit	Value
Rated Input Speed	rpm	3000
Max. Input Speed	rpm	4500
Tilting Stiffness	Nm/arcmin	300
Torsional Stiffness	Nm/arcmin	50
Max. Axial Force	kN	8.5
Max. Radial Force	kN	11
Average Angular Play	arcsec	±20
Backlash	arcmin	p0 ≤1; p1 ≤3; p2 ≤5
Moment of Inertia	10 ⁻⁶ kg·m²	16
Weight	kg	4.66

Output Side



Input Side



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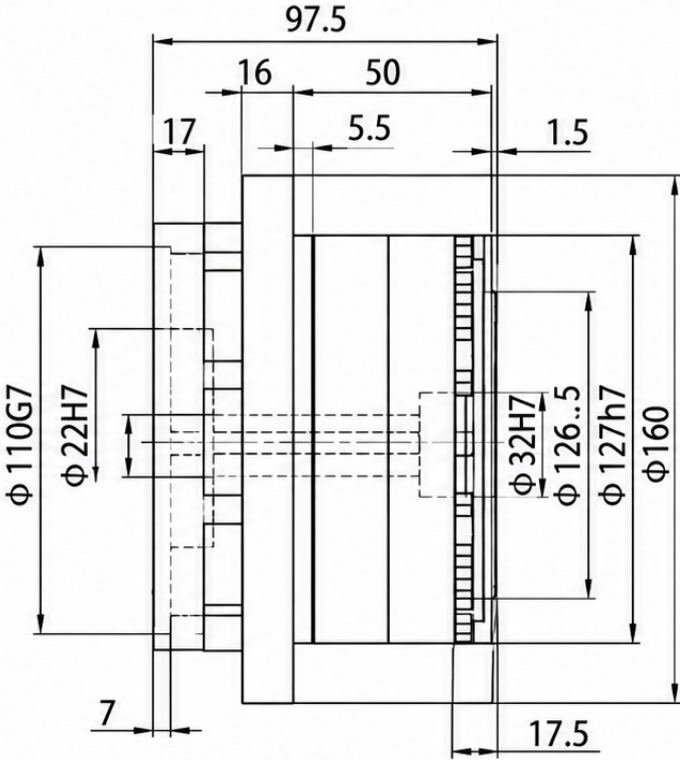
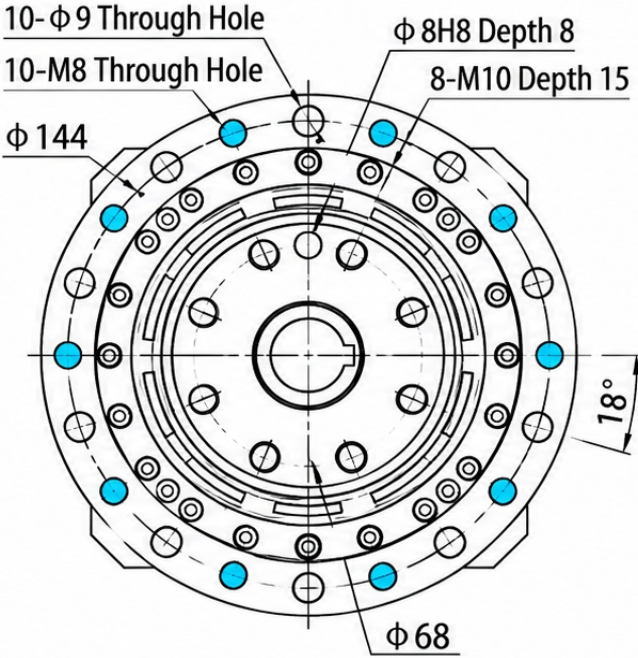
CGR-F Flange Output Series | Technical Specifications

CGR-F-040 | Flange Output Cycloidal Gear Reducer

Model No.	Axis Ratio	Shell Ratio	Rated Output Torque (Nm)	Max. Acceleration Torque (Nm)	Permissible Torque (Nm)	Max. No-load Moment (Nm)
CGR-F-040-R31	31	32	250	500	750	0.7
CGR-F-040-R51	51	52	300	600	900	0.7
CGR-F-040-R81	81	82	450	900	1350	0.65
CGR-F-040-R121	121	122	600	1200	1800	0.65

Common Specifications	Unit	Value
Rated Input Speed	rpm	3000
Max. Input Speed	rpm	4000
Tilting Stiffness	Nm/arcmin	450
Torsional Stiffness	Nm/arcmin	75
Max. Axial Force	kN	10.9
Max. Radial Force	kN	14.3
Average Angular Play	arcsec	±15
Backlash	arcmin	p0 ≤1; p1 ≤3; p2 ≤5
Moment of Inertia	10 ⁻⁶ kg·m²	65
Weight	kg	7.5

Output Side



Input Side

